



Case Study- Changing Biomes at Penrith Lakes - Stage 5 Geography Program

Summary

This new, unique and highly engaging fieldwork program allows students to investigate first hand how humans have altered the natural biome in the Penrith Lakes Parkland Area.

Students will see remnant (last remaining) vegetation of the original woodland biome. The theme of changing a natural biome for food production by Aboriginals and Europeans is highlighted. The reduction in agricultural yields led to a further change in human activities - quarrying. An examination of mining altering the physical characteristics of the area follows. Students then undertake a 'hands-on' assessment of environmental impacts of human alterations to the area. Biodiversity loss and water pollution are assessed by students. This incorporates water testing, invertebrate sampling and birdlife survey. Basic soil testing evaluations are also experienced.

Finally there is a 'real life' look at successful sustainability strategies that minimise environmental impacts now and in the future. Students are guaranteed to be involved in a number of engaging and 'hands on' experiences during the course of the day through which students will further develop their geography inquiry, field work and group work skills.

Time	Activity (Group 1) - Program may vary due to arrival/weather	Group 2
9.30am to 2.00pm	Arrive at Penrith Lakes EEC / classroom introduction about the changing biome.	With Group 1
	Bus to Castlereagh Hall – reinforce general information about the changing biome.	With Group 1
	Disembark at Castlereagh Hall to view remnant woodland vegetation (biome)	With Group 1
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	Outside area – Instruction in water and soil testing, dip netting. Then board bus.	With Group 1
	Station 1: Assessment of environmental impacts – Water testing AND	Station 4 AND
	Station 2: Assessment of environmental impacts – Basic soil testing evaluation	Station 5
	Station 3: Assessment of environmental impacts - Invertebrate survey dipnetting	Station 2 AND
	Station 4: Assessment of environmental impacts – Bird survey AND	Station 1
	Station 5: Sustainable strategies - Water management walk	Station 3
	Walk to bus, return to PLEEC for LUNCH	LUNCH
	Wrap up - looking at key inquiry questions.	With Group 1

Students and adults will need:

- o Covered footwear
- $\circ \quad \text{ Sun-safe clothing and hat } \\$
- o Sunscreen and insect repellent already applied
- o Water bottle
- Morning tea and lunch
- o Pens, paper and folders/clipboards are generally needed

Litter- free Lunch and Morning Tea: Students and staff are encouraged to pack a litter-free lunch containing no throwaway packaging. Everything in a litter free lunch can be re-used, composted or recycled. Food is brought in re-usable containers rather than disposable plastic wrap. Drinks are brought in refillable bottles.

Location Map:

Entry to the centre is via <u>Gate A</u> of the Regatta Centre, off Old Castlereagh Road Cranebook.

Please turn <u>LEFT</u> straight after entry via gate A into a designated bus drop off area (in front of the security building) and we will meet you at the bus.

Please Note: Extra bus travel is required to access fieldwork areas, so your bus will be required to stay for the duration of the excursion.

